

# Intermittent Fasting 101 — The Ultimate Beginner's Guide

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Intermittent fasting (IF) is currently one of the world's most popular health and fitness trends.

People are using it to lose weight, improve their health and simplify their lifestyles.

Many studies show that it can have powerful effects on your body and brain and may even help you live longer ([1](#), [2](#), [3](#)[Trusted Source](#)).

This is the ultimate beginner's guide to intermittent fasting.

[Intermittent fasting](#) (IF) is an eating pattern that cycles between periods of fasting and eating.

It doesn't specify which foods you should eat but rather *when* you should eat them.

In this respect, it's not a diet in the conventional sense but more accurately described as an eating pattern.

Common intermittent fasting methods involve daily 16-hour fasts or fasting for 24 hours, twice per week.

Fasting has been a practice throughout human evolution. Ancient hunter-gatherers didn't have supermarkets, refrigerators or food available year-round. Sometimes they couldn't find anything to eat.

As a result, humans evolved to be able to function without food for extended periods of time.

In fact, fasting from time to time is more natural than always eating 3–4 (or more) meals per day.

Fasting is also often done for religious or spiritual reasons, including in Islam, Christianity, Judaism and Buddhism.

## Summary

Intermittent fasting (IF) is an eating pattern that cycles between periods of fasting and eating. It's currently very popular in the health and fitness community.

There are several different ways of doing intermittent fasting — all of which involve splitting the day or week into eating and fasting periods.

During the fasting periods, you eat either very little or nothing at all.

These are the most popular methods:

- **The 16/8 method:** Also called the Leangains protocol, it involves skipping breakfast and restricting your daily eating period to 8 hours, such as 1–9 p.m. Then you fast for 16 hours in between.
- **Eat-Stop-Eat:** This involves fasting for 24 hours, once or twice a week, for example by not eating from dinner one day until dinner the next day.
- **The 5:2 diet:** With [this method](#), you consume only 500–600 calories on two nonconsecutive days of the week, but eat normally the other 5 days.

By reducing your calorie intake, all of these methods should cause weight loss as long as you don't compensate by eating much more during the eating periods.

Many people find the 16/8 method to be the simplest, most sustainable and easiest to stick to. It's also the most popular.

## SUMMARY

There are several different ways to do intermittent fasting. All of them split the day or week into eating and fasting periods.

When you fast, several things happen in your body on the cellular and molecular level.

For example, your body adjusts hormone levels to make stored body fat more accessible.

Your cells also initiate important repair processes and change the expression of genes.

Here are some changes that occur in your body when you fast:

- **Human Growth Hormone (HGH):** The [levels of growth hormone](#) skyrocket, increasing as much as 5-fold. This has benefits for fat loss and muscle gain, to name a few ([4Trusted](#)

[Source](#), [5Trusted Source](#), [6Trusted Source](#), [7Trusted Source](#)).

- **Insulin:** [Insulin sensitivity](#) improves and levels of insulin drop dramatically. Lower insulin levels make stored body fat more accessible ([8Trusted Source](#)).
- **Cellular repair:** When fasted, your cells initiate cellular repair processes. This includes autophagy, where cells digest and remove old and dysfunctional proteins that build up inside cells ([9Trusted Source](#), [10Trusted Source](#))
- **Gene expression:** There are changes in the function of genes related to longevity and protection against disease ([11Trusted Source](#), [12Trusted Source](#)).

These changes in hormone levels, cell function and gene expression are responsible for the health benefits of intermittent fasting.

## SUMMARY

When you fast, human growth hormone levels go up and insulin levels go down. Your body's cells also change the expression of genes and initiate important cellular repair processes.

Weight loss is the most common reason for people to try intermittent fasting ([13Trusted Source](#)).

By making you eat fewer meals, intermittent fasting can lead to an automatic reduction in [calorie intake](#).

Additionally, intermittent fasting changes hormone levels to facilitate weight loss.

In addition to lowering insulin and increasing growth hormone levels, it increases the release of the fat burning hormone norepinephrine (noradrenaline).

Because of these changes in hormones, short-term fasting may [increase your metabolic rate](#) by 3.6–14% ([14Trusted Source](#), [15Trusted Source](#)).

By helping you eat fewer and burn more calories, intermittent fasting causes weight loss by changing both sides of the calorie equation.

Studies show that intermittent fasting can be a very [powerful weight loss tool](#).

A 2014 review study found that this eating pattern can cause 3–8% weight loss over 3–24 weeks, which is a significant amount, compared to most weight loss studies ([1](#)).

According to the same study, people also lost 4–7% of their waist circumference, indicating a significant loss of harmful [belly fat](#) that builds up around your organs and causes disease ([1](#)).

Another study showed that intermittent fasting causes less muscle loss than the more standard method of continuous calorie restriction ([16Trusted Source](#)).

However, keep in mind that the main reason for its success is that intermittent fasting helps you eat fewer calories overall. If you binge and eat massive amounts during your eating periods, you may not lose any weight at all.

## SUMMARY

Intermittent fasting may slightly boost metabolism while helping you eat fewer calories. It's a very effective way to lose weight and belly fat.

Many studies have been done on intermittent fasting, in both animals and humans.

These studies have shown that it can have [powerful benefits](#) for weight control and the health of your body and brain. It may even help you [live longer](#).

Here are the main health benefits of intermittent fasting:

- **Weight loss:** As mentioned above, intermittent fasting can help you lose weight and belly fat, without having to consciously restrict calories ([1](#), [13Trusted Source](#)).
- **Insulin resistance:** Intermittent fasting can reduce [insulin resistance](#), lowering blood sugar by 3–6% and fasting insulin levels by 20–31%, which should protect against type 2 diabetes ([1](#)).
- **Inflammation:** Some studies show reductions in markers of inflammation, a key driver of many chronic diseases ([17Trusted Source](#), [18Trusted Source](#), [19Trusted Source](#)).
- **Heart health:** Intermittent fasting may reduce “bad” LDL cholesterol, blood triglycerides, inflammatory markers, blood sugar and insulin resistance — all risk factors for heart disease ([1](#), [20Trusted Source](#), [21](#)).
- **Cancer:** Animal studies suggest that intermittent fasting may prevent cancer ([22Trusted Source](#), [23Trusted Source](#), [24Trusted Source](#), [25Trusted Source](#)).
- **Brain health:** Intermittent fasting increases the brain hormone BDNF and may aid the growth of new nerve cells. It may also protect against Alzheimer's disease ([26Trusted Source](#), [27Trusted Source](#), [28Trusted Source](#), [29Trusted Source](#)).
- **Anti-aging:** Intermittent fasting can extend lifespan in rats. Studies showed that fasted rats lived 36–83% longer ([30](#), [31](#)).

Keep in mind that research is still in its early stages. Many of the studies were small, short-term or conducted in animals. Many questions have yet to be answered in higher quality human studies ([32Trusted Source](#)).

## SUMMARY

Intermittent fasting can have many benefits for your body and brain. It can cause weight loss and may reduce your risk of type 2 diabetes, heart disease and cancer. It may also help you live longer.

Eating healthy is simple, but it can be incredibly hard to [maintain](#).

One of the main obstacles is all the work required to plan for and cook healthy meals.

Intermittent fasting can make things easier, as you don't need to plan, cook or clean up after as many meals as before.

For this reason, intermittent fasting is very popular among the life-hacking crowd, as it improves your health while simplifying your life at the same time.

## SUMMARY

One of the major benefits of intermittent fasting is that it makes healthy eating simpler. There are fewer meals you need to prepare, cook and clean up after.

Intermittent fasting is certainly not for everyone.

If you're underweight or have a history of eating disorders, you should not fast without consulting with a health professional first.

In these cases, it can be downright harmful.

## Should Women Fast?

There is some evidence that intermittent fasting may not be as beneficial for women as it is for men.

For example, one study showed that it improved insulin sensitivity in men, but worsened blood sugar control in women ([33Trusted Source](#)).

Though human studies on this topic are unavailable, studies in rats have found that intermittent fasting can make female rats emaciated, masculinized, infertile and cause them to miss cycles ([34Trusted Source](#), [35Trusted Source](#)).

There are a number of anecdotal reports of women whose menstrual period stopped when they started doing IF and went back to normal when they resumed their previous eating pattern.

For these reasons, women should be careful with intermittent fasting.

They should [follow separate guidelines](#), like easing into the practice and stopping immediately if they have any problems like amenorrhea (absence of menstruation).

If you have issues with [fertility](#) and/or are trying to conceive, consider holding off on intermittent fasting for now. This eating pattern is likely also a bad idea if you're pregnant or breastfeeding.

## SUMMARY

People who are underweight or have a history of eating disorders should not fast.

There is also some evidence that intermittent fasting may be harmful to some women.

Hunger is the main side effect of intermittent fasting.

You may also feel weak and your brain may not perform as well as you're used to.

This may only be temporary, as it can take some time for your body to adapt to the new meal schedule.

If you have a medical condition, you should consult with your doctor before trying intermittent fasting.

This is particularly important if you:

- Have diabetes.

- Have problems with blood sugar regulation.
- Have low blood pressure.
- Take medications.
- Are underweight.
- Have a history of eating disorders.
- Are a woman who is trying to conceive.
- Are a woman with a history of amenorrhea.
- Are pregnant or breastfeeding.

All that being said, intermittent fasting has an outstanding safety profile. There is nothing dangerous about not eating for a while if you're healthy and well-nourished overall.

## SUMMARY

The most common side effect of intermittent fasting is hunger. People with certain medical conditions should not fast without consulting with a doctor first.

Here are answers to the most common questions about intermittent fasting.

### 1. Can I Drink Liquids During the Fast?

Yes. [Water](#), [coffee](#), [tea](#) and other non-caloric beverages are fine. Do not add sugar to your coffee. Small amounts of milk or cream may be okay.

Coffee can be particularly beneficial during a fast, as it can blunt hunger.

### 2. Isn't It Unhealthy to Skip Breakfast?

No. The problem is that most stereotypical [breakfast skippers](#) have unhealthy lifestyles. If you make sure to eat healthy food for the rest of the day then the practice is perfectly healthy.

### 3. Can I Take Supplements While Fasting?

Yes. However, keep in mind that some supplements like fat-soluble vitamins may work better when taken with meals.

### 4. Can I Work out While Fasted?

Yes, fasted workouts are fine. Some people recommend taking [branched-chain amino acids](#) (BCAAs) before a fasted workout.

You can find many BCAA products on [Amazon](#).

### 5. Will Fasting Cause Muscle Loss?

All weight loss methods can cause muscle loss, which is why it's important to lift weights and keep your [protein intake](#) high. One study showed that intermittent fasting causes less muscle loss than regular calorie restriction ([16Trusted Source](#)).

### 6. Will Fasting Slow Down My Metabolism?

No. Studies show that short-term fasts actually boost metabolism ([14Trusted Source](#), [15Trusted Source](#)). However, longer fasts of 3 or more days can [suppress](#) metabolism ([36Trusted Source](#)).

## 7. Should Kids Fast?

Allowing your child to fast is probably a bad idea.

Chances are that you've already done many intermittent fasts in your life.

If you've ever eaten dinner, then slept late and not eaten until lunch the next day, then you've probably already fasted for 16+ hours.

Some people instinctively eat this way. They simply don't feel hungry in the morning.

Many people consider the 16/8 method the simplest and most sustainable way of intermittent fasting — you might want to try this practice first.

If you find it easy and feel good during the fast, then maybe try moving on to more advanced fasts like 24-hour fasts 1–2 times per week (Eat-Stop-Eat) or only eating 500–600 calories 1–2 days per week (5:2 diet).

Another approach is to simply fast whenever it's convenient — simply skip meals from time to time when you're not hungry or don't have time to cook.

There is no need to follow a structured intermittent fasting plan to derive at least some of the benefits.

Experiment with the [different approaches](#) and find something that you enjoy and fits your schedule.

### SUMMARY

It's recommended to start with the 16/8 method, then perhaps later move on to longer fasts. It's important to experiment and find a method that works for you.

Intermittent fasting is not something that anyone needs to do.

It's simply one of many lifestyle strategies that can improve your health. Eating [real food](#), exercising and taking care of your [sleep](#) are still the most important factors to focus on.

If you don't like the idea of fasting, then you can safely ignore this article and continue to do what works for you.

At the end of the day, there is no one-size-fits-all solution when it comes to nutrition. The [best diet](#) for you is the one you can stick to in the long run.

Intermittent fasting is great for some people, not others. The only way to find out which group you belong to is to try it out.

If you feel good when fasting and find it to be a sustainable way of eating, it can be a very powerful tool to lose weight and improve your health.

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